IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	DELUGA et al.	Group Art Unit:	1621
Serial No.:	10/676,324	Examiner:	Unknown
Filed:	September 30, 2003	Docket No.:	110.02040101
		Confirmation No.:	6481
Title:	PRODUCTION OF HYDROGEN FROM ALCOHOLS		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting the following documents along with this Transmittal Sheet (which is submitted in triplicate):

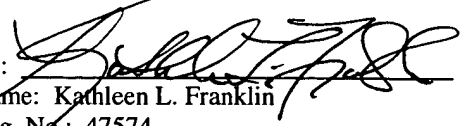
X **Small entity status is entitled to be asserted in the above-identified application.**
X An itemized return postcard.
__ A Petition for Extension of Time for __ month(s) and a check in the amount of $__ for the required fee.
X An Information Disclosure Statement (2 pgs); copy of 1 application (69 pgs); 1449 forms (7 pgs); and copies of 57 documents cited on the 1449 forms.
__ A check in the amount of $__, representing ___.
__ A certified copy of a __ application, Serial No. _, filed _____, the right of priority of which is claimed under 35 U.S.C. §119.
__ Other: ___.
__ Amendment ___ No Additional fee is required. ___ The fee has been calculated as shown:

Fee Calculation for Claims Pending After Amendment					
	Pending Claims after Amendment (1)	Claims Paid for Earlier (2)	Number of Additional Claims (1-2)	Cost per Additional Claim	Additional Fees Required
Total Claims				x $9 =	
Independent Claims				x $43 =	
One or More New Multiple Dependent Claims Presented? If Yes, Add $145 Here →					
Total Additional Claim Fees Required					

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 13-4895. Triplicate copies of this sheet are enclosed.

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this Transmittal Letter and the paper(s), as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 14th day of January, 2004.

MUETING, RAASCH & GEBHARDT, P.A.
Customer Number: 26813

By: 
Name: Kathleen L. Franklin
Reg. No.: 47574
Direct Dial: 612-305-1873
Facsimile: 612-305-1228

(SMALL ENTITY TRANSMITTAL UNDER RULE 1.8)

PATENT
Docket No. 110.02040101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	DELUGA et al.	Group Art Unit:	1621
Serial No.:	10/676,324	Examiner:	Unknown
Confirmation No.:	6481		
Filed:	September 30, 2003		

For: PRODUCTION OF HYDROGEN FROM ALCOHOLS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with C.F.R. §§ 1.97 *et. seq.*, the materials enclosed herewith are brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. Per M.P.E.P. § 609, the information cited in the present Information Disclosure Statement shall not be construed to be an admission that the information is, or is considered to be, material to patentability. Consideration of each of the documents listed on the attached 1449 forms is respectfully requested. As this patent application was filed after June 30, 2003, copies of the U.S. patents and U.S. patent application publications listed on the attached 1449 forms have not been submitted. Pursuant to the provisions of M.P.E.P. §609, Applicants further request that a copy of the 1449 forms, marked as being considered and initialed by the Examiner, be returned with the next Official Communication.

Applicants also wish to bring the Examiner's attention to the following pending U.S. Application, as well as any documents, Office Actions that may include rejections of similar claims, and any provisional U.S. patent applications referenced in the pending U.S. application or in its file wrapper. A copy of the below-listed pending U.S. Patent Application is provided herewith.

List of Pending Non-Published U.S. Patent Applications

Applicant(s)	Application Number	Filing Date
SCHMIDT et al.	10/620,183	07/15/03

It is believed that no fee is due, as this Information Disclosure Statement is filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

The Examiner is invited to contact Applicants' Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

Respectfully submitted for

DELUGA et al.
By
Mueting, Raasch & Gebhardt, P.A.
P.O. Box 581415
Minneapolis, MN 55458-1415
Phone: (612)305-1220
Facsimile: (612)305-1228
Customer Number 26813

CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 14th day of January, 2004.

KATHLEEN L. FRANKLIN

14 January 2004
Date

KLF/skd

By:
Attorney: Kathleen L. Franklin
Reg. No. 47,574
Direct Dial (612) 305-1873

INFORMATION DISCLOSURE STATEMENT	**Atty. Docket No.:** 110.02040101	**Serial No.:** 10/676,324
	Applicants: DELUGA et al.	**Confirmation No.:** 6481
	Application Filing Date: Sept. 30, 2003	**Group:** 1621
	Information Disclosure Statement mailed: January 14, 2004	

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
		3,900,646	08/19/75	Clyde			
		3,957,685	05/18/76	Heide et al.			
		3,998,758	12/21/76	Clyde			
		4,088,607	05/09/78	Weidenbach et al.			
		4,251,239	02/17/81	Clyde et al.			
		4,253,302	03/03/81	Asano et al.			
		4,308,233	12/29/81	Narumiya et al.			
		4,568,595	02/04/86	Morris			
		4,810,685	03/07/89	Twigg et al.			
		4,863,712	09/05/89	Twigg et al.			
		4,940,826	07/10/90	Font Freide et al.			
		5,105,052	04/14/92	Font Freide et al.			
		5,221,464	06/22/93	Durante et al.			
		5,382,741	01/17/95	Astbury et al.			
		5,500,149	03/19/96	Green et al.			
		5,593,935	01/14/97	Golunski et al.			
		5,597,771	01/28/97	Hu et al.			
		5,639,929	06/17/97	Bharadwaj et al.			
		5,648,582	07/15/97	Schmidt et al.			
		5,654,491	08/05/97	Goetsch et al.			
		5,856,585	01/05/99	Sanfilippo et al.			
		5,905,180	05/18/99	Yokoyama et al.			
		5,980,731	11/09/99	Kao et al.			

EXAMINER	**Date Considered**

***Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

INFORMATION DISCLOSURE STATEMENT	**Atty. Docket No.:** 110.02040101	**Serial No.:** 10/676,324
	Applicants: DELUGA et al.	**Confirmation No.:** 6481
	Application Filing Date: Sept. 30, 2003	**Group:** 1621
	Information Disclosure Statement mailed: January 14, 2004	

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
		6,072,097	06/06/00	Yokoyama et al.			
		6,083,425	07/04/00	Clawson et al.			
		6,123,913	09/26/00	Clawson et al.			
		6,126,908	10/03/00	Clawson et al.			
		6,197,717 B1	03/06/01	Alexander et al.			
		6,207,122 B1	03/27/01	Clawson et al.			
		6,221,280 B1	04/24/01	Anumakonda et al.			
		6,245,303 B1	06/12/01	Bentley et al.			
		6,254,807 B1	07/03/01	Schmidt et al.			
		6,254,839 B1	07/03/01	Clawson et al.			
		6,387,554 B1	05/14/02	Verykios			
		6,407,301 B1	06/18/02	Foley et al.			
		6,444,867 B1	09/03/02	Samsel et al.			
		6,452,061 B1	09/17/02	Schmidt et al.			
		6,605,376 B2	08/12/03	Verykios			
		US 2001/ 0009653 A1	07/26/01	Clawson et al.			

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
		0576096 A2	12/29/93	EP				
		0640559 A1	03/01/95	EP				
		EP 0922011 B1	07/25/01	EP				
		EP 1007472 B1	09/03/03	EP				
		1,067,957	05/10/67	GB				

EXAMINER	**Date Considered**

***Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

INFORMATION DISCLOSURE STATEMENT JAN 20 2004	**Atty. Docket No.:** 110.02040101	**Serial No.:** 10/676,324
	Applicants: DELUGA et al.	**Confirmation No.:** 6481
	Application Filing Date: Sept. 30, 2003	**Group:** 1621
	Information Disclosure Statement mailed: January 14, 2004	

		EP 1118583 A2	07/25/01	EP				
		FR 1379027	11/20/64	FR (abstract only)				X
		JP 2001-080904	03/27/01	JP (English language abstract included)				X
		JP 2001-089108	04/03/01	JP (English language abstract included)				X
		WO 98/08771	03/05/98	WIPO				
		WO 99/61369	12/02/99	WIPO				

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial		Document Description
		Aupretre et al., "Le vaporeformage catalytique: Application a la production embarquee d'hydrogene a partir d'hydrocarbures ou d'alcools," *Ann. Chim. Sci. Mat.*, 2001, *26*(4):93-106 (with English language abstract).
		Bodke et al., "The Effect of Ceramic Supports on Partial Oxidation of Hydrocarbons Over Noble Metal Coated Monoliths," *Journal of Catalysis*, 1998; *179*:138-149.
		Bodke et al., "High Selectivities to Ethylene by Partial Oxidation of Ethane," *Science*, 1999; *285*:712-715.
		Bodke et al., "Oxidative Dehydrogenation of Ethane at Millisecond Contact Times: Effect of H_2 Addition," *J. Catalysis*, 2000; *191*:62-74.
		Brown, "A comparative study of fuels for on-board hydrogen production for fuel-cell-powered automobiles," *Int. J. Hydrogen Energy*, 2001, *26*:381-397.
		Burch et al., "Investigation of the reactions of acetaldehyde on promoted rhodium catalysts," *Applied Catalysis A: General*, 1992; *88*:61-76.
		Cavallaro et al., "Ethanol steam reforming in a molten carbonate fuel cell. A preliminary kinetic investigation," *Int. J. Hydrogen Energy*, 1996; *21*(6):465-469.
		Cavallaro, "Ethanol Steam Reforming on $Rh/A1_2O_3$ Catalysts," *Energy & Fuels*, 2000, *14*:1195-1199.
		Chornet et al., "Harnessing hydrogen," *Nature*, 29 Aug. 2002; *418*:928-929.

EXAMINER	**Date C nsidered**

***Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: 110.02040101	Serial No.: 10/676,324
	Applicants: DELUGA et al.	Confirmation No.: 6481
	Application Filing Date: Sept. 30, 2003	Group: 1621
	Information Disclosure Statement mailed: January 14, 2004	

Examiner Initial		Document Description
		Cohn et al., "Onboard plasmatron generation of hydrogen for extremely low emission vehicles with internal combustion engines," *Int. J. Vehicle Design*, 1996; *17*(5/6):550-561.
		Cordi et al., "Transient oxidation of volatile organic compounds on a $CuO/A1_2O_3$ catalyst," *Applied Catalysis B: Environmental*, 1997; *14*:23-36.
		Cortright et al., "Hydrogen from catalytic reforming of biomass-derived hydrocarbons in liquid water," *Nature*, 29 Aug. 2002; *418*:964-967.
		Dietz III et al., "Partial Oxidation of C_5 and C_6 Alkanes over Monolith Catalysts at Short Contact Times," *Journal of Catalysis*, 1996; *176*:459-473.
		Fatsikostas et al., "Steam reforming of biomass-derived ethanol for the production of hydrogen for fuel cell applications," *Chem. Comm.*, 2001; 851-852.
		Fishtik et al., "A thermodynamic analysis of hydrogen production by steam reforming of ethanol via response reactions," *Int. J. Hydrogen Energy*, 2000; *25*:31-45.
		Freni, "Rh based catalysts for indirect internal reforming ethanol applications in molten carbonate fuel cells," *Journal of Power Sources*, 2001; *94*:14-19.
		Galvita et al., "Synthesis gas production by steam reforming of ethanol," *Applied Catalysis A: General*, 2001; *220*:123-127.
		Goetsch et al., "Microsecond Catalytic Partial Oxidation of Alkanes," *Science*, 1996; *271*:1560-1562.
		Gomez et al., "Kinetic Study of Partial Oxidation of Ethanol over VMgO Catalyst," *Ind. Eng. Chem. Res.*, 1997; *36*:3468-3472.
		Hacohen et al., "Driving Cycle Simulation of a Vehicle Motored by a SI Engine Fueled with H_2-Enriched Gasoline," *Int. J. of Hydrogen Energy*, 1991; *16*(10):695-702.
		Henning et al., "Oxidative dehydrogenation of ethane at short contact times: species and temperature profiles within and after the catalyst," *Chem. Eng. Sci.*, 2002; *57*(14):2615-2625.

EXAMINER	Date Considered

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT	**Atty. Docket No.:** 110.02040101	**Serial N .:** 10/676,324
	Applicants: DELUGA et al.	**Confirmation No.:** 6481
	Application Filing Date: Sept. 30, 2003	**Group:** 1621
	Information Disclosure Statement mailed: January 14, 2004	

Examiner Initial		Document Description
		Hickman et al., "Synthesis gas formation by direct oxidation of methane over Pt monoliths," *Journal of Catalysis*, 1992; *138*:267-282.
		Hickman et al., "Synthesis Gas Formation by Direct Oxidation of Methane over Rh Monoliths," *Catal. Lett.*, 1993; *17*(3-4):223-237.
		Hickman et al., "Steps in CH_4 Oxidation on Pt and Rh Surfaces; High-Temperature Reactor Simulations," *AIChE Journal*, 1993; *39*(7):1164-1177.
		Hickman et al., "Production of syngas by direct catalytic oxidation of methane," *Science*, 15 Jan. 1993; *259*:343-346.
		Huff et al., "Partial Oxidation of CH_4, C_2H_6, and C_3H_8 on Monoliths at Short Contact Times," *Stud. Surf. Sci. Catal.*, Natural Gas Conversion II, Proceedings of the Third Natural Gas Conversion Symposium, Sydney, Australia, 4-9 July 1993; *81*:315-320 (1994).
		Ioannides, "Thermodynamic analysis of ethanol processors for fuel cell applications," *Journal of Power Sources*, 2001, *92*:17-25.
		Jamal et al., "On-Board Generation of Hydrogen-Rich Gaseous Fuels - A Review," *Int. J. Hydrogen Energy*, 1994; *19*(7):557-572.
		Klein et al., "Catalytic partial oxidation of methane to syngas: staged and stratified reactors with steam addition," *Stud. Surf. Sci. Catal.*, Natural Gas Conversion VI, Proceedings of the Sixth Natural Gas Conversion Symposium, Alaska, 17-22 June 2001; *136*:245-250 (2001).
		Krummenacher et al., "Catalytic Partial Oxidation of Higher Hydrocarbons at Millisecond Contact Times: Decane, Hexadecane, and Diesel Fuel," 18th North American Catalysis Society Meeting, Cancun, Mexico, June 1-6, 2003; 2 pgs.
		Krummenacher et al., "Catalytic partial oxidation of higher hydrocarbons at millisecond contact times: decane, hexadecane, and diesel fuel," *Journal of Catalysis*, 2003;*215*:332-343.
		Lakshmi et al., "Synthesis, Characterization, and Activity Studies of Vanadia Supported on Zirconia and Phosphorus-Modified Zirconia," *Langmuir*, 1999; *15*:3521-3528.

EXAMINER	**Date Considered**

***Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

INFORMATION DISCLOSURE STATEMENT	Atty. Docket N .: 110.02040101	Serial No.: 10/676,324
	Applicants: DELUGA et al.	Confirmation N .: 6481
	Application Filing Date: Sept. 30, 2003	Group: 1621
	Information Disclosure Statement mailed: January 14, 2004	

Examiner Initial		Document Description
		Mariño et al., "Hydrogen from steam reforming of ethanol. Characterization and performance of copper-nickel supported catalysts," *Int. J. Hydrogen Energy*, 1998;*23*(12):1095-1101.
		Mariño et al., "Hydrogen production from steam reforming of bioethanol using Cu/Ni/K/γ-$A1_2O_3$ catalysts. Effect of Ni," *Int. J. Hydrogen Energy*, 2001, *26*:665-668.
		Mazzocchia et al., "Hydrogenation of CO over ZrO_2-supported Rh catalysts: kinetic aspects," *Journal of Molecular Catalysis*, 1990; *60*:283-294.
		Mazzocchia et al., "Hydrogenation of CO over Rh/SiO_2-CeO_2 catalysts: kinetic evidences," *Journal of Molecular Catalysis A: Chemical*, 2001; *165*:219-230.
		O'Connor et al., "High yields of synthesis gas by millisecond partial oxidation of higher hydrocarbons,"*Catal. Lett.*, 2000; *70*:99-107.
		Otsuka et al., "The Partial Oxidation of Light Alkanes (CH_4, C_2H_6, C_3H_8) Over B-P Mixed Oxides," *Stud. Surf. Sci. Catal.*, Natural Gas Conversion, Proceedings of the Natural Gas Conversion Symposium, Oslo, 12-17 Aug. 1990; *61*:15-23 (1991).
		Pestryakov et al., "Physicochemical study of active sites of metal catalysts for alcohol partial oxidation," *Journal of Molecular Catalysis A: Chemical*, 2000; *158*:325-329.
		Rampe et al., "Hydrogen generation from biogenic and fossil fuels by autothermal reforming," *Journal of Power Sources*, 2000; *86*:536-541.
		Su et al., "Heterogeneous Partial Oxidation of Light Alkanes," Abstracts of Papers, 224th ACS National Meeting, Boston, MA, 2002; 3 pgs.
		Tamman, "Zur Rekristallisation von Metallen und Salzen," *Anorg. Allg. Chem.*, 1923; *126*:119-128.
		Traxel et al., "Partial Oxidation of methanol at millisecond contact times," *Applied Catalysis A: General*, 2003; *244*:129-140.
		Vasudeva et al., "Steam reforming of ethanol for hydrogen production: thermodynamic analysis," *Int. J. Hydrogen Energy*, 1996; *21*(1):13-18.

EXAMINER	Date Considered

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT	**Atty. Docket No.:** 110.02040101	**Serial No.:** 10/676,324
	Applicants: DELUGA et al.	**Confirmation No.:** 6481
	Application Filing Date: Sept. 30, 2003	**Group:** 1621
	Information Disclosure Statement mailed: January 14, 2004	

Examiner Initial		Document Description
		Vickers et al., "PLOT Column Considerations for the Gas Chromatographic Analysis of Ozone Precursors," *J&W Scientific*, Aug. 1998:9 pgs.
		Wang et al., "Study on the partial oxidation of ethanol to hydrogen in the presence of Ni-Fe catalyst," *Wuii Huaxue Xuebao (Acta Physico-Chimica Sinica)*, 2002, *18*(5):426-431; with English language abstract and translation, 18 pgs.

EXAMINER	**Date Considered**

***Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**